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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/101,341	07/08/1998	KENT MALMGREN	000500-128	9545

21839 7590 11/04/2002

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EXAMINER
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WHITE, EVERETT NMN

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 11/04/2002 32

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/101,341

Applicant(s)

MALMGREN ET AL.

Examiner

EVERETT WHITE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 20, 2002 has been entered.
2. Amendment E filed August 20, 2002 has been received and entered into the record.
3. Claims 1-16 and 19-21 are pending in the case.
4. The text of those sections of title 35, U. S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

5. Claims 1-12 and 19-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Burrow (EP 232,121) in view of Holst et al (US Patent No. 4,197,371) for the reasons already in previously filed Office Actions.
6. Applicant's arguments filed August 20, 2002 have been fully considered but they are not persuasive. Applicants continue to present arguments regarding the differences in the order by which the instantly claimed process is carried out. The instantly claimed process set forth a process wherein the polysaccharide is dissolved first in water and then combined with a water-miscible organic solvent and cross-linker whereby the Burrow EP patent discloses dissolving the polysaccharide in a water-miscible organic solvent and cross-linker first and then adding the solution into an aqueous medium. This argument is not persuasive since the language set forth in the instant claims set forth no patentable difference between the instantly claimed process and the process disclosed in the Burrow EP patent, especially with use of the term "comprising" in line 1 of

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Claim 1 which indicates an instantly claimed process that is open-ended and one of enlargement and not restriction. Such claim language embraces the indicated procedural order of the Burrow EP patent.

Applicants amended the claims to indicate that the cross-linker used in the claimed process ionically cross-links the polysaccharide and argues that the cross-linking agents present in the reaction of the Burrow EP patent forms covalent chemical cross-links with the polysaccharide thereof. However, the differences in cross-linking agents between the instantly claimed process and the process of the Burrow EP patent is not patentable because use of a known member of a class of materials in a process is not patentable if other members of the class were known to be useful for that purpose. The cross-linking agents set forth in the instant claims are well known in the art.

Applicants further argue one of ordinary skill in the art would not have been motivated to substitute the Burrow EP patent covalent cross-linking agent with the polyvinylamine of the Holst et al patent in the absence of any disclosure of suggestion that such polyvinylamine is effective to form covalent chemical cross-links. However, this argument is not persuasive since the Holst et al patent suggests polyvinylamine as a crosslinking agent for cellulose (cellulose is a well known polysaccharide). The polyvinyl-amine of the Holst et al patent and the covalent chemical cross-links of the Burrow EP patent are well known cross-linking agents. Use of known crosslinking agents in a process is not patentable if other crosslinking agents were known to be useful for this purpose. Accordingly, the rejection of Claims 1-12 and 19-21 as being unpatentable over Burrow EP patent in view of the Holst et al patent is maintained for the reasons of record.

7. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lask et al (US Patent No. 4,250,306) in view of Ota (JP 401148874).

Applicants claim a polysaccharide fiber and an absorbent structure containing said polysaccharide fiber.

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The Lask et al patent discloses carboxymethylcellulose fibers, which are suitable for use in fiber materials for absorbing and retaining aqueous solutions, which are substantially insoluble in water. The polysaccharide fiber of the instant claims encompassed the carboxymethylcellulose fiber of the Lask et al patent. Lask et al discloses that the carboxymethylcellulose fibers are wet-cross-linked fibers of originally water-soluble salts of carboxymethylcellulose having a degree of substitution of about 0.4 to 1.6 (see column 1, lines 54-64). The above description of the Lask et al patent embraces the description of the polysaccharide fiber including the limitations claimed in instant Claims 13 and 14. The Lask et al patent further discloses that carboxymethylcelluloses can be incorporated as additions in the absorptive compositions used, e.g., in tampons, sanitary pads, non-woven fabrics, baby's napkins, or under-blankets, which frequently have cellulose as a base material, or they are the sole constituents of these compositions. The description of absorptive compositions in the Lask et al patent embraces the absorbent structure set forth in instant Claims 15 and 16. The polysaccharide fiber of the instant claims differ from the polysaccharide fiber of the Lask et al patent by disclosing the process by which the polysaccharide fiber was produced, which process is not disclosed in the Lask et al patent.

The Ota patent discloses a super water-absorbing fiber that has a good curd permeability and water-insoluble, which was obtained by carboxymethylating a cellulose fiber and subjecting it to a crosslinking treatment. The Ota patent discloses that the resultant fiber is insoluble, super absorbing, can be adapted to sufficiently swell when absorbing water and broadly applicable to sanitary materials and agricultural uses (see English Language abstract). The polysaccharide fibre of the instant claims encompassed the carboxymethylated cellulose fiber of the Ota patent. The polysaccharide fiber of the instant claims differ from the polysaccharide fiber of the Ota et al patent by disclosing the process by which the polysaccharide fiber was produced, which process is not disclosed in the Ota patent. While Applicants claims are directed to a product limited by the process employed in its production there is no reason found for

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concluding that the product claimed could be distinguished from the product of the Lask et al and Ota patents merely because the claimed product was produced under the specific conditions recited, which conditions fall within the purview of the disclosure of the Lask et al and Ota patents. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of Applicants invention to replace the polysaccharide fiber of the instant claims with the carboxymethylated cellulose fiber of the Lask et al and Ota patents in view of their closely related structures and the resulting expectation of similar absorbent properties, to obtain an absorbent structure containing the instantly claimed polysaccharide fiber.

### ***Summary***

8. Claims 1-16 and 19-21 are rejected.

### ***Examiner's Telephone Number, Fax Number, and Other Information***

9. For 24 hour access to patent application information 7 days per week, or for filing applications, please visit our website at [www.uspto.gov](http://www.uspto.gov) and click on the button "Patent Electronic Business Center" for more information.

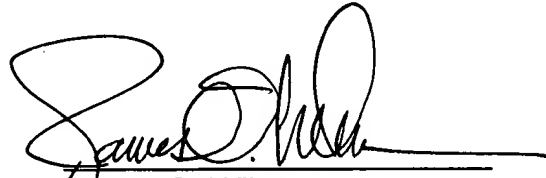
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is (703) 308-4621. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reached on (703) 308-4624. The fax phone number for this Group is (703) 308-4556.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

*E. White*  
E. White

  
James O. Wilson  
Supervisory Primary Examiner  
**Technology Center 1600**